LIST OF CONTENTS

1990

Vol. 28, No. 1

1 Instructions for Contributors to *Toxicon*

R. V. CONSIDINE, J. K. BIELICKI, L. L. SIMPSON and J. R. SHERWIN — 13 Tetanus toxin attenuates the ability of phorbol myristate acetate to mobilize cytosolic protein kinase C in NG-108 cells

DENG FWU HWANG, CHUANG HSUN CHUEH and SEN SHYONG JENG — 21 Occurrence of tetrodotoxin in the gastropod mollusk *Natica lineata* (lined moon shell)

R. S. NORTON, G. BOBEK, J. O. IVANOV, M. THOMSON, E. FIALA-BEER, R. L. MORITZ and R. J. SIMPSON — 29 Purification and characterization of proteins with cardiac stimulatory and haemolytic activity from the anemone *Actinia tenebrosa*

K. YOSHIZUMI, S.-Y. LIU, T. MIYATA, S. SAITA, M. OHNO, S. IWANAGA and H. KIHARA — 43 Purification and amino acid sequence of basic protein I, a lysine-49-phospholipase A_2 with low activity, from the venom of *Trimeresurus flavoviridis* (Habu snake)

K. HARADA, K. MATSUURA, M. SUZUKI, M. F. WATANABE, S. OISHI, A. M. DAHLEM, V. R. BEASLEY and W. W. CARMICHAEL — 55 Isolation and characterization of the minor components associated with microcystins LR and RR in the cyanobacterium (blue-green algae)

G. P. JAYANTHI and T. V. GOWDA — 65 Synergistic interaction of a protease and protease inhibitors from Russell's viper (*Vipera russelli*) venom

B. LOMONTE, G. ROJAS, J. M. GUTIÉRREZ and G. RAMÍREZ — 75 Isolation of a galactose-binding lectin from the venom of the snake *Bothrops godmani* (Godmann's pit viper)

M.-P. SAUVIAT — 83 Effect of phoratoxin B, a toxin isolated from mistletoe, on frog skeletal muscle fibres

S. KASTURI and T. V. GOWDA — 91 Detection, using antibodies, of pharmacologically active sites, apart from the catalytic site, on venom phospholipase A_2

G. ROJAS, M. ESPINOZA, B. LOMONTE and J. M. GUTIÉRREZ — 101 Effect of storage temperature on the stability of the liquid polyvalent antivenom produced in Costa Rica

C. TAKASAKI, A. SUGAMA, A. YANAGITA, N. TAMIYA, E. G. ROWAN and A. L. HARVEY — 107 Effects of chemical modifications of Pa-11, a phospholipase A_2 from the venom of Australian king brown snake (*Pseudechis australis*), on its biological activities

Short Communication
F. DUCANCEL, G. GUIGNERY-FRELAT, J.-C. BOULAIN and A. MÉNEZ — 119 Nucleotide sequence and structure analysis of cDNAs encoding short-chain neurotoxins from venom glands of a sea snake (*Aipysurus laevis*)

Software Survey Section — i

International Society on Toxinology—Membership Application — v

Vol. 28, No. 2

Letters to the Editor
Z. MARETIĆ and B. VEJNOVIĆ — 125 Record weeverfish, *Trachinus radiatus*

M. GUERON and S. SOFER — 127 Vasodilators and calcium blocking agents as treatment of cardiovascular manifestations of human scorpion envenomation

C. Y. Kao and T. Yasumoto	129	Tetrodotoxin in "zombie powder"
D. K. Stevens and R. I. Krieger	133	N-methylation of anatoxin-a abolishes nicotinic cholinergic activity
T. K. S. Kumar, R. Radha and S. Rambhav	135	What's in a name?
S. D. Aird	136	Call for an IST Nomenclatural Committee
I. I. Kaiser	137	Toxin nomenclature
D. Mebs	138	Reply to the Letter to the Editor by Kumar, Radha and Rambhav
Report and Abstracts	141	8th European Symposium on Animal, Plant and Microbial Toxins, Poreč, Yugoslavia, 24–27 September 1989
R. X. Bicalho, O. A. Rocha, L. G. D. Heneine, A. Magalhães and I. F. Heneine	171	The effect of stepwise iodination on biological properties of *Bothrops jararaca* venom
A. M. Moura da Silva, M. R. D'Impèrio Lima, A. K. Nishikawa, C. I. Brodskyn, M. C. dos Santos, M. F. D. Furtado, W. Dias da Silva and I. Mota	181	Antigenic cross-reactivity of venoms obtained from snakes of genus *Bothrops*
C. L. Ownby and T. R. Colberg	189	Comparison of the immunogenicity and antigenic composition of several venoms of snakes in the family Crotalidae
S. A. Preston, C. E. Davis and J. B. Harris	201	The assessment of muscle fibre loss after the injection of the venom of *Notechis scutatus* (Australian tiger snake)
P. E. B. Santos, S. D. Souza, L. Freire-Maia and A. P. Almeida	215	Effects of crotoxin on the isolated guinea pig heart
K. K. Tan, K. E. Choo and W. A. Ariffin	225	Snake bite in Kelantanese children: a five year experience
Short Communications		
I. G. Marshall and A. L. Harvey	231	Selective neuromuscular blocking properties of α-conotoxins *in vivo*
J. V. Tarazona and F. Sanz	235	Toxicity of fractions obtained from the legume species *Astragalus lusitanicus* Lam. *lusitanicus*
M. Yotsu, M. Iorizzi and T. Yasumoto	238	Distribution of tetrodotoxin, 6-*epi*tetrodotoxin, and 11-deoxytetrodotoxin in newts
J. W. Burnett, I. B. Othman, R. Endean, P. J. Fenner, V. I. Callanan and J. A. Williamson	242	Verapamil potentiation of *Chironex* (box-jellyfish) antivenom
Software Survey Section	i	
International Society on Toxinology—Membership Application	v	

Vol. 28, No. 3

Report and Abstracts	245	Toxins '89 Symposium: Queensland, Australia, 29 September–1 October 1989
H. S. Selistre, L. S. Queiroz, O. A. B. Cunha, G. E. P. De Souza and J. R. Giglio	261	Isolation and characterization of hemorrhagic, myonecrotic and edema-inducing toxins from *Bothrops insularis* (jararaca ilhoa) snake venom

L. Biyiti, D. Pesando, S. Puiseux-Dao, J.-P. Girard and P. Payan — 275 Effect of antibacterial plant flavanones on the intracellular calcium compartment involved in the first cleavage of sea urchin eggs

G. A. Ramírez, P. L. Fletcher Jr and L. D. Possani — 285 Characterization of the venom from *Crotalus molossus nigrescens* Gloyd (black tail rattlesnake): isolation of two proteases

J. Mochca-Morales, B. M. Martin and L. D. Possani — 299 Isolation and characterization of Helothermine, a novel toxin from *Heloderma horridum horridum* (Mexican beaded lizard) venom

G. Egea, X. Rabasseda, C. Solsona, J. Marsal and B. Bizzini — 311 Tetanus toxin blocks potassium-induced transmitter release and rearrangement of intramembrane particles at pure cholinergic synaptosomes

C. Takasaki, J. Suzuki and N. Tamiya — **319 Purification and properties of several phospholipases A_2 from the venom of Australian king brown snake (*Pseudechis australis*)**

C. Takasaki, F. Yutani and T. Kajiyashiki — **329 Amino acid sequences of eight phospholipases A_2 from the venom of Australian king brown snake, *Pseudechis australis***

M. Cavalieri, N. Corvaja and A. Grasso — **341 Immunocytological localization by monoclonal antibodies of α-latrotoxin in the venom gland of the spider *Latrodectus tredecimguttatus***

Short Communication
S. Ameno, K. Ameno, C. Fuke, T. Kiryu and I. Ijiri — **347 IgG subclass distributions of anti-horse serum antibodies and natural venom-antibodies produced in response to antivenom injection or snake bite in humans**

Software Survey Section — i

International Society on Toxinology—Membership Application — v

Vol. 28, No. 4

G. M. Lewis, S. A. Minton and J. H. Slack — 351 BALB/cAn B cells and T cells have distinct susceptibilities to cytotoxic effects of snake venom

Y. Komori and H. Sugihara — 359 Purification and physiological study of a hypotensive factor from the venom of *Vipera aspis aspis* (aspic viper)

R. W. Dickey, S. C. Bobzin, D. J. Faulkner, F. A. Bencsath and D. Andrzejewski — 371 Identification of okadaic acid from a Caribbean dinoflagellate, *Prorocentrum concavum*

B. Lomonte, J. M. Gutiérrez, E. Carmona and M. E. Rovira — 379 Equine antibodies to *Bothrops asper* myotoxin II: isolation from polyvalent antivenom and neutralizing ability

Nget Hong Tan and M. N. Saifuddin — 385 Isolation and characterization of a hemorrhagin from the venom of *Ophiophagus hannah* (king cobra)

J. B. Harris and A.-M. Surprenant — 393 Effects of notexin on neuromuscular transmission in the guinea pig vas deferens

J. Weber, T. Schürholz and E. Neumann — 403 The nematocyst extract of *Hydra attenuata* causes single channel events in lipid bilayers

J. Sakurai, Y. Fujii and M. Shirotani — 411 Contraction induced by *Clostridium perfringens* alpha toxin in the isolated rat ileum

J. M. Gutiérrez, C. Avila, Z. Camacho and B. Lomonte — 419 Ontogenetic changes in the venom of the snake *Lachesis muta stenophrys* (bushmaster) from Costa Rica

B. J. Woodhams, S. E. Wilson, Bao Cheng Xin and R. A. Hutton — 427 Differences between the venoms of two sub-species of Russell's viper: *Vipera russelli pulchella* and *Vipera russelli siamensis*

T. F. Jacobsen, O. Sand, T. Bjøro, H. E. Karlsen and J.-G. Iversen — 435 Effect of Diamphidia toxin, a bushman arrow poison, on ionic permeability in nucleated cells

Short Communications

H. J. Zeringue Jr and S. P. McCormick — 445 Aflatoxin production in cultures of *Aspergillus flavus* incubated in atmospheres containing selected cotton leaf-derived volatiles

L. Martínez de Villarreal, R. Velazco-Campos, A. Piñeyro López and R. González Alanís — 449 Effects of toxin T-544 from the *Karwinskia humboldtiana* (buckthorn) plant upon mouse embryos explanted at 11 days

Xin Zhou, Li-Ping Shen and Cheng-Wu Chi — 453 Isolation and nucleotide sequence determination of a gene encoding a heat-stable enterotoxin of *Escherichia coli*

Software Survey Section — i

International Society on Toxinology—Membership Application — v

Vol. 28, No. 5

Announcement — 457 9th European Symposium on Animal, Plant and Microbial Toxins, 23–26 September 1990, Lohusalu, Estonia, U.S.S.R.

In Appreciation — 459

Soe-Soe, Than-Than and Khin-Ei-Han — 461 The nephrotoxic action of Russell's viper (*Vipera russelli*) venom

K. Shiomi, S. Yamamoto, H. Yamanaka, T. Kikuchi and K. Konno — 469 Liver damage by the crown-of-thorns starfish (*Acanthaster planci*) lethal factor

G. Menestrina, C. L. Bashford and C. A. Pasternak — 477 Pore-forming toxins: experiments with *S. aureus* α-toxin, *C. perfringens* θ-toxin and *E. coli* haemolysin in lipid bilayers, liposomes and intact cells

F. C. Knoop, R. J. Martig and W. J. Boehm — 493 The effect of *Escherichia coli* heat-stable enterotoxin on protein kinase activity

B. Grimmelt, M. S. Nijjar, J. Brown, N. Macnair, S. Wagner, G. R. Johnson and J. F. Amend — 501 Relationship between domoic acid levels in the blue mussel (*Mytilus edulis*) and toxicity in mice

R. Kharrat, H. Darbon, C. Granier and H. Rochat — 509 Structure–activity relationships of scorpion α-neurotoxins: contribution of arginine residues

A. Y. Nassar, G. Abu-Sinna and S. A. Rahim — 525 Effect of a bradykinin potentiating fraction, from venom of the Egyptian scorpion, *Buthus occitanus*, on the ovaries and endometrium of mice

A. Sandström, C. Glemarec, J. A. O. Meriluoto, J. E. Eriksson and J. Chattopadhyaya — 535 Structure of a hepatotoxic pentapeptide from the cyanobacterium *Nodularia spumigena*

W. S. Skinner, P. A. Dennis, A. Lui, R. L. Carney and G. B. Quistad — 541 Chemical characterization of acylpolyamine toxins from venom of a trap-door spider and two tarantulas

C. K. Angerhofer, W. T. Shier and L. P. Vernon — 547 Phospholipase activation in the cytotoxic mechanism of thionin purified from nuts of *Pyrularia pubera*

F.-J. Plasencia and Y. Rosenstein 559 Effect of *in vivo* administration of T-2 toxin on peritoneal murine macrophages

R. D. Stoner, W. H. Adams, D. N. Slatkin and H. W. Siegelman 569 Cyclosporine A inhibition of microcystin toxins

L. A. Smith and J. J. Schmidt 575 Cloning and nucleotide sequences of crotamine genes

Reviews 587

Software Survey Section i

International Society on Toxinology—Membership Application v

Vol. 28, No. 6

Announcement 595 9th European Symposium on Animal, Plant and Microbial Toxins, 23–26 September 1990, Lohusalu, Estonia, U.S.S.R.

Report and Abstracts 597 Third Pan-American Symposium on Animal, Plant and Microbial Toxins, Oaxtepec, Morelos State, Mexico, 9–12 January 1990

E. Papini, G. Schiavo, R. Rappuoli and C. Montecucco 631 Histidine-21 is involved in diphtheria toxin NAD^+ binding

F. L. Djebari and M. F. Martin-Eauclaire 637 Purification and characterization of a phospholipase A_2 from *Cerastes cerastes* (horn viper) snake venom

J. E. Fletcher, K. Michaux and Ming-Shi Jiang 647 Contribution of bee venom phospholipase A_2 contamination in melittin fractions to presumed activation of tissue phospholipase A_2

J. E. Fletcher, Ming-Shi Jiang, L. Tripolitis, L. A. Smith and J. Beech 657 Interactions in red blood cells between fatty acids and either snake venom cardiotoxin or halothane

S. D. Aird, W. G. Kruggel and I. I. Kaiser 669 Amino acid sequence of the basic subunit of Mojave toxin from the venom of the Mojave rattlesnake (*Crotalus s. scutulatus*)

T. P. Smith and C. J. Bailey 675 Activity requirements of epidermolytic toxin from *Staphylococcus aureus* studied by an *in vitro* assay

M. Martinez, E. D. Rael and N. L. Maddux 685 Isolation of a hemorrhagic toxin from Mojave rattlesnake (*Crotalus scutulatus scutulatus*) venom

P. Galettis and R. S. Norton 695 Biochemical and pharmacological studies of the mechanism of action of tenebrosin-C, a cardiac stimulatory and haemolytic protein from the sea anemone, *Actinia tenebrosa*

M. Kodama, T. Ogata, S. Sakamoto, S. Sato, T. Honda and T. Miwatani 707 Production of paralytic shellfish toxins by a bacterium *Moraxella* sp. isolated from *Protogonyaulax tamarensis*

Short Communications

L. A. Ribeiro, M. T. Jorge, R. V. Piesco and S. de Andrade Nishioka 715 Wolf spider bites in São Paulo, Brazil: a clinical and epidemiological study of 515 cases

B. W. Lennon, D. Plummer and I. I. Kaiser 718 Effects of subunit cross-linking on the properties of crotoxin

M. O. Domingos, J. L. Cardoso, A. M. Moura da Silva and I. Mota 723 The humoral immune responses of patients bitten by the snake *Bothrops jararaca* (*jararaca*)

N. I. Chernevskaja, O. A. Krishtal and A. Y. Valeyev	727	Inhibitions of the GABA-induced currents of rat neurons by the alkaloid isocoryne from the plant *Corydalis pseudoadunca*
H. W. Burnett and J. W. Burnett	731	Prolonged blurred vision following coelenterate envenomation
M. T. Assakura and F. R. Mandelbaum	734	Cleavage of immunoglobulins by *Moojeni* protease A, from the venom of *Bothrops moojeni*
J. Mellanby, M. Matsuda, N. Sugimoto, D.-L. Lei and B. Bizzini	737	Fragment A–B of tetanus toxin does not block neuromuscular transmission in the goldfish
Reviews	743	
Software Survey Section	i	
International Society on Toxinology—Membership Application	v	

Vol. 28, No. 7

Announcement	749	Symposium on Neuroactive Compounds, 2–3 December 1990, Havana, Cuba
	751	Species Index. *Toxicon* Volumes 1–27
V. B. Solberg, F. H. Broski, R. E. Dinterman and D. T. George	803	Penetration of [^{3}H]T-2 mycotoxin through abraded and intact skin and methods to decontaminate [^{3}H]T-2 mycotoxin from abrasions
M. D. Owen, L. A. Pfaff, R. E. Reisman and J. Wypych	813	Phospholipase A_2 in venom extracts from honey bees (*Apis mellifera* L.) of different ages
I. Othman and J. W. Burnett	821	Techniques applicable for purifying *Chironex fleckeri* (box-jellyfish) venom
C. L. Ownby, T. Nika, K. Imai and H. Sugihara	837	Pathogenesis of hemorrhage induced by bilitoxin, a hemorrhagic toxin isolated from the venom of the common cantil (*Agkistrodon bilineatus bilineatus*)
H. Schweitz, J.-N. Bidard and M. Lazdunski	847	Purification and pharmacological characterization of peptide toxins from the black mamba (*Dendroaspis polylepis*) venom
Short Communications		
J. L. Glenn and R. C. Straight	857	Venom characteristics as an indicator of hybridization between *Crotalus viridis viridis* and *Crotalus scutulatus scutulatus* in New Mexico
J. V. Ordóñez, H. M. Rubinstein and J. W. Burnett	863	Flow cytometric detection of jellyfish venom induced cytotoxicity
I. Karunasagar, I. Karunasagar, Y. Oshima and T. Yasumoto	868	A toxin profile for shellfish involved in an outbreak of paralytic shellfish poisoning in India
Software Survey Section	i	
International Society on Toxinology—Membership Application	v	

Vol. 28, No. 8

Announcement	871	10th World Congress on Animal, Plant and Microbial Toxins, 3–8 November 1991, Singapore
R. F. KEELER, D. C. BAKER and W. GAFFIELD	873	Review article—Spirosolane-containing *Solanum* species and induction of congenital craniofacial malformations
D. M. ANDERSON, D. M. KULIS, J. J. SULLIVAN and S. HALL	885	Toxin composition variations in one isolate of the dinoflagellate *Alexandrium fundyense*
R. N. HATI, M. MANDAL and A. K. HATI	895	Active immunization of rabbit with gamma irradiated Russell's viper venom toxoid
M. A. POLI, C. B. TEMPLETON, W. L. THOMPSON and J. F. HEWETSON	903	Distribution and elimination of brevetoxin PbTx-3 in rats
W. W. LIN, Y. M. CHEN, S. Y. LEE, H. NISHIO, T. KIMURA, S. SAKAKIBARA and C. Y. LEE	911	Cardiovascular effects of two disulfide analogues of sarafotoxin S6b
J.-F. FAIVRE, E. DEROUBAIX, A. COULOMBE, A.-M. LEGRAND and E. CORABOEUF	925	Effect of maitotoxin on calcium current and background inward current in isolated ventricular rat myocytes
S. L. YATES, M. BURNS, E. CONDREA, A. GHASSEMI, R. SHINA and P. ROSENBERG	939	Phospholipid hydrolysis and loss of membrane integrity following treatment of rat brain synaptosomes with β-bungarotoxin, notexin, and *Naja naja atra* and *Naja nigricollis* phospholipase A_2
S. CHETTIBI, F. LYALL and A. J. LAWRENCE	953	Rapid activation of the non-toxic basic isoform of phospholipase A_2 from *Naja mossambica mossambica* (spitting cobra) by long-chain fatty acylation
A. C. ASHTON, K. EDWARDS and J. O. DOLLY	963	ADP-ribosylation of cerebrocortical synaptosomal proteins by cholera, pertussis and botulinum toxins
M. JANSSEN, T. A. FREYVOGEL and J. MEIER	975	Antigenic relationship between the venom of the night adder *Causus maculatus* and venoms of other viperids
Short Communications J. EDWARDS, B. J. HAWGOOD and I. C. H. SMITH	985	The effects of inhibitors of arachidonate metabolism on spontaneous and evoked endplate potentials at normal and crotoxin-treated frog neuromuscular junctions
Y. TOMIHARA, Y. KAWAMURA, K. YONAHA, M. NOZAKI, M. YAMAKAWA and C. YOSHIDA	989	Neutralization of hemorrhagic snake venoms by sera of *Trimeresurus flavoviridis* (Habu), *Herpestes edwardsii* (mongoose) and *Dinodon semicarinatus* (Akamata)
B. R. SINGH	992	Identification of specific domains in botulinum and tetanus neurotoxins
S. N. BYE, T. H. T. COETZER and M. F. DUTTON	997	An enzyme immunoassay for atractyloside, the nephrotoxin of *Callilepis laureola* (Impila)
Software Survey Section	i	
International Society on Toxinology—Membership Application	v	

Vol. 28, No. 9

Announcement	1001	Third International Symposium on Neurotoxins in Neurobiology, 16–20 March 1991, Solis, Uruguay

Announcement	1003	10th World Congress on Animal, Plant and Microbial Toxins, 3–8 November 1991, Singapore
M. Gueron, G. Margulis and S. Sofer	1005	Echocardiographic and radionuclide angiographic observations following scorpion envenomation by *Leiurus quinquestriatus*
A. Borges, E. C. Arantes and J. R. Giglio	1011	Isolation and characterization of toxic proteins from the venom of the Venezuelan scorpion *Tityus discrepans* (Karsch)
K. Suzuki, T. Une, M. Yamazaki and T. Takeda	1019	Purification and some properties of a hemolysin from the poisonous mushroom *Rhodophyllus rhodopolius*
J. C. de Freitas and M. I. Sawaya	1029	Increase of mammalian intestinal motility by the iminopurine caissarone isolated from the sea anemone *Bunodosoma caissarum*
P. Mollier, G. Brochier and Y. Morot Gaudry-Talarmain	1039	The action of notexin from tiger snake venom (*Notechis scutatus scutatus*) on acetylcholine release and compartmentation in synaptosomes from electric organ of *Torpedo marmorata*
M. Barral-Netto, A. Schriefer, V. Vinhas and A. R. Almeida	1053	Enzyme-linked immunosorbent assay for the detection of *Bothrops jararaca* venom
M. Asakawa, T. Noguchi, H. Seto, K. Furihata, K. Fujikura and K. Hashimoto	1063	Structure of the toxin isolated from carp (*Cyprinus carpio*) bile
Ying-Bing Liu and Ke Xu (Ke Hsu)	1071	Lack of the blocking effect of cobrotoxin from *Naja naja atra* venom on neuromuscular transmission in isolated nerve muscle preparations from poisonous and non-poisonous snakes
P. Marxen, G. Ahnert-Hilger, H. H. Wellhöner and H. Bigalke	1077	Tetanus antitoxin binds to intracellular tetanus toxin in permeabilized chromaffin cells without restoring Ca^{2+}-induced exocytosis
A. E. Ali, O. Arakawa, T. Noguchi, K. Miyazawa, Y. Shida and K. Hashimoto	1083	Tetrodotoxin and related substances in a ribbon worm *Cephalothrix linearis* (Nemertean)
K. Terao, E. Ito, M. Oarada, M. Murata and T. Yasumoto	1095	Histopathological studies on experimental marine toxin poisoning—5. The effects in mice of yessotoxin isolated from *Patinopecten yessoensis* and of a desulfated derivative
I. S. Richards, A. P. Kulkarni, S. M. Brooks and R. Pierce	1105	Florida red-tide toxins (brevetoxins) produce depolarization of airway smooth muscle
Short Communications		
M. Bruno, P. M. B. Gucci, E. Pierdominici, A. Ioppolo and L. Volterra	1113	Presence of saxitoxin in toxic extracts from *Gonyaulax polyedra*
T. R. John and I. I. Kaiser	1117	Comparison of venom constituents from four tiger snake (*Notechis*) subspecies
Software Survey Section	i	
International Society on Toxinology—Membership Application	v	

Vol. 28, No. 10

Announcement	1123	Third International Symposium on Neurotoxins in Neurobiology, 16–20 March 1991, Solis, Uruguay
Announcement	1125	10th World Congress on Animal, Plant and Microbial Toxins, 3–8 November 1991, Singapore

Letters to the Editor

J. M. Gutiérrez, G. Rojas, B. Lomonte, J. A. Gené, F. Chaves, J. Alvarado and E. Rojas — 1127 Standardization of assays for testing the neutralizing ability of antivenoms

C. L. Ownby — 1129 Comments on Letter to the Editor—standardization of assays for testing the neutralizing ability of antivenoms

R. D. G. Theakston — 1131 Comments on letter of Gutiérrez *et al.* on standardization of assays for testing the neutralizing activity of antivenoms

Deng Fwu Hwang, Chuang Hsun Chueh and Sen Shyong Jeng — 1133 Tetrodotoxin secretion from the lined moon shell *Natica lineata* in response to external stimulation

B. Lomonte, J. M. Gutiérrez, M. F. Furtado, R. Otero, J.-P. Rosso, O. Vargas, E. Carmona and M. E. Rovira — 1137 Isolation of basic myotoxins from *Bothrops moojeni* and *Bothrops atrox* snake venoms

B. Rouzaire-Dubois and J.-M. Dubois — 1147 Characterization of palytoxin-induced channels in mouse neuroblastoma cells

M. J. Holmes, R. J. Lewis and N. C. Gillespie — 1159 Toxicity of Australian and French Polynesian strains of *Gambierdiscus toxicus* (Dinophyceae) grown in culture: characterization of a new type of maitotoxin

C. P. Bianchi and S. Narayan — 1173 Bimodal operation of the ryanodine-sensitive transducer calcium channel

S. W. Tsao, T. B. Ng and H. W. Yeung — 1183 Toxicities of trichosanthin and alpha-momorcharin, abortifacient proteins from Chinese medicinal plants, on cultured tumor cell lines

N.-H. Tan and A. Armugam — 1193 *In vivo* interactions between neurotoxin, cardiotoxin and phospholipases A_2 isolated from Malayan cobra (*Naja naja sputatrix*) venom

L. Gunthorpe and A. M. Cameron — 1199 Widespread but variable toxicity in scleractinian corals

L. Gunthorpe and A. M. Cameron — 1221 Intracolonial variation in toxicity in scleractinian corals

Y. N. Singh and W. F. Dryden — 1229 The augmenting action of banana tree juice on skeletal muscle contraction

Short Communication

M. R. Mustafa and A. H. A. Hadi — 1237 Neuromuscular blocking activity of a glycosidic extract of the plant *Sarcolobus globosus*

Reviews — 1241

Software Survey Section — i

International Society on Toxinology—Membership Application — v

Vol. 28, No. 11

Letters to the Editor

B. Lomonte and J. M. Gutiérrez — 1245 Dissociation of enzymatic and toxic activities by the use of antibodies

S. Kasturi and T. V. Gowda — 1246 Comment on the Letter to the Editor by Lomonte and Gutiérrez

Regular Papers

G. A. Bradfisch and S. L. Harmer — 1249 — ω-Conotoxin GVIA and nifedipine inhibit the depolarizing action of the fungal metabolite, destruxin B on muscle from the tobacco budworm (*Heliothis virescens*)

V. M. Mahnir, E. P. Kozlovskaya and G. B. Elyakov — 1255 — Modification of carboxyl groups in sea anemone toxin RTX-III from *Radianthus macrodactylus*

M. Ismail, M. A. Abd-Elsalam and A. M. Morad — 1265 — Do changes in body temperature following envenomation by the scorpion *Leiurus quinquestriatus* influence the course of toxicity?

P. Gopalakrishnakone — 1285 — A computer based colour-photo database system for dangerous animals and plants: academic and public information networks

A. M. Moura-da-Silva, D. F. Cardoso and M. M. Tanizaki — 1293 — Differences in distribution of myotoxic proteins in venoms from different *Bothrops* species

C. A. Gates and R. S. Rees — 1303 — Serum amyloid P component: its role in platelet activation stimulated by sphingomyelinase D purified from the venom of the brown recluse spider (*Loxosceles reclusa*)

V. Barenholz-Paniry, J. S. Ishay, S. Freeman and H. Sohmer — 1317 — Evoked potential changes in cats following injection of an extract from the venom sac of the oriental hornet (*Vespa orientalis*)

M. Rojas, M. T. Nuñez and F. Zambrano — 1325 — Inhibitory effect of a toxic peptide isolated from a waterbloom of *Microcystis* sp. (cyanobacteria) on iron uptake by rabbit reticulocytes

M. Bruce, R. Bukownik, A. T. Eldefrawi, M. E. Eldefrawi, R. Goodnow, Jr, T. Kallimopoulos, K. Konno, K. Nakanishi, M. Niwa and P. N. R. Usherwood — 1333 — Structure–activity relationships of analogues of the wasp toxin philanthotoxin: non-competitive antagonists of quisqualate receptors

Short Communications

L. Gunthorpe and A. M. Cameron — 1347 — Toxic exudate from the hard coral *Goniopora tenuidens*

V. Williams and J. White — 1351 — Variation in venom composition and reactivity in two specimens of yellow-faced whip snake (*Demansia psammophis*) from the same geographical area

Nget-Hong Tan, M. Nomanbhay Saifuddin and M. I. Nik Jaafar — 1355 — Preparation of antibodies to king cobra (*Ophiophagus hannah*) venom hemorrhagin and investigation of their cross-reactivity

Z. Zhelev, M. Ilarionova, A. Zheleva, C. Alexiev, K. Halacheva and D. Todorov — 1360 — Cytotoxicity on L1210 leukemic cells of beta-amanitin–concanavalin A and phallacidin–concanavalin A conjugates

J. E. Dyr, J. Suttnar, J. Šimák, H. Fořtová and F. Kornalík — 1364 — The action of a fibrin-promoting enzyme from the venom of *Agkistrodon contortrix contortrix* on rat fibrinogen and plasma

P. Bette, F. Mauler, C. Mohr and E. Habermann — 1368 — Microinjection of α-toxin from *Clostridium novyi* type A promotes meiotic maturation in *Xenopus laevis* oocytes

S. Laobhripatr, K. Limpakarnjanarat, O. Sangwonloy, S. Sudhasaneya, B. Anuchatvorakul, S. Leelasitorn and K. Saitanu — 1372 — Food poisoning due to consumption of the freshwater puffer *Tetraodon fangi* in Thailand

Software Survey Section — i

International Society on Toxinology—Membership Application — v

Vol. 28, No. 12

K. E. Panter, R. F. Keeler, T. D. Bunch and R. J. Callan	1377	Review article—Congenital skeletal malformations and cleft palate induced in goats by ingestion of *Lupinus*, *Conium* and *Nicotiana* species
R. M. Kini and H. J. Evans	1387	Review article—Effects of snake venom proteins on blood platelets
E. Ueno and P. Rosenberg	1423	Inhibition of phosphorylation of rat synaptosomal proteins by snake venom phospholipase A_2 neurotoxins (β-bungarotoxin, notexin) and enzymes (*Naja naja atra*, *Naja nigricollis*)
J. A. O. Meriluoto, S. E. Nygård, A. M. Dahlem and J. E. Eriksson	1439	Synthesis, organotropism and hepatocellular uptake of two tritium-labeled epimers of dihydromicrocystin-LR, a cyanobacterial peptide toxin analog
S. A. Weinstein and L. A. Smith	1447	Preliminary fractionation of tiger rattlesnake (*Crotalus tigris*) venom
C.-S. Liu, J.-M. Chen, C.-H. Chang, S.-W. Chen, I.-H. Tsai, H.-S. Lu and T.-B. Lo	1457	Revised amino acid sequences of the three major phospholipases A_2 from *Bungarus fasciatus* (banded krait) venom
K. D. Zimmerman, G. R. Gates and H. Heatwole	1469	Effects of venom of the olive sea snake, *Aipysurus laevis*, on the behaviour and ventilation of three species of prey fish
L. Rodrigues-Simioni, B. J. Hawgood and I. C. H. Smith	1479	Properties of the early phases of crotoxin poisoning at frog neuromuscular junctions
T. V. Freitas, C. L. Fortes-Dias and C. R. Diniz	1491	Protection against the lethal effects of *Crotalus durissus terrificus* (South American rattlesnake) venom in animals immunized with crotoxin
Short Communication		
F. Kornalík and Z. Vorlová	1497	Non-specific therapy of a hemorrhagic diathesis after a bite by a young *Bothrops asper* (barba amarilla): a case report
Software Survey Section	i	
International Society on Toxinology—Membership Application	v	
Volume Contents and Author Index, Volume 28	vii	